

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/656,857

Applicant: Meenakshi Sundaram, et al.

Filed: September 6, 2003

TC/ A.U.: 1731

Examiner: Peter Chin

Title: METHODS FOR MODIFYING ELECTRICAL PROPERTIES OF  
PAPERMAKING COMPOSITIONS USING CARBON DIOXIDE

Attorney Docket: Serie 6052

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

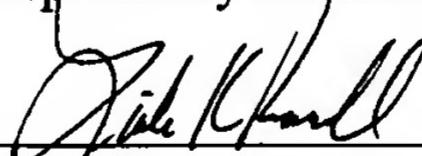
Dear Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicant hereby submits the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98.

No fee is due at this time in accordance with 37 C.F.R. § 1.97. However, the Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 01-1375.

To assist the Examiner, the documents previously submitted for your review, on March 31, 2004, have been corrected and are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.  
This paper is submitted in duplicate.

Respectfully submitted,

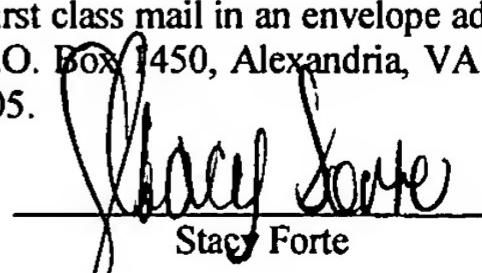
  
Linda K. Russell  
Registration No. 34,918

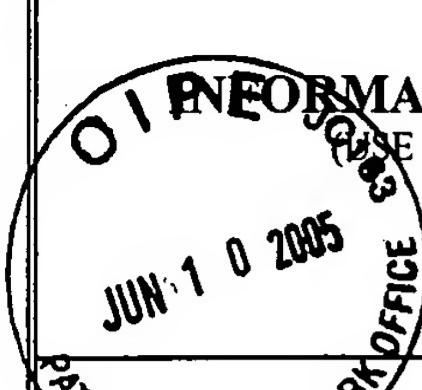
Date: June 8, 2005

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### CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8th day of June, 2005.

  
Stacy Forte



INFORMATION DISCLOSURE CITATION (USE SEVERAL SHEETS IF NECESSARY)				ATTY. DOCKET NO. Serie 6052	SERIAL NO. 10/656,857		
				APPLICANT(S) V.S. Meenakshi Sundaram, et al.			
FILING DATE September 6, 2003				GROUP Unknown			
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A1	5,505,819	4-9-96	De Witt, et al.			
	A2	5,156,719	10-20-92	Passaretti			
	A3	5,043,017	8-27-91	Passaretti			
	A4	6,228,161 B1	5-8-01	Drummond			
	A5	6,540,878 B1	4-1-03	Leino			
	A6	5,378,322	1-3-95	Hornsey			
	A7	6,540,870 B1	4-1-03	Laurila-Lumme, et al.			
	A8	6,589,387 B1	7-8-03	Leino, et al.			
	A9	6,537,425 B2	3-25-03	Rheims, et al.			
	A10	6,436,232 B1	8-20-02	Silenius, et al.			
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	A12	6,251,356 B1	6-26-01	Mathur			
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	A14	6,072,309	6-6-00	Watson, et al.			
	A15	4,535,285	8-13-85	Evans, et al.			
	A16	6,419,789	07-2002	Yeh, et al.			
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	A18	5,830,364	11-1998	Bleakley, et al.			
	A19	2002/0148581	10-17-02	De Rigaud, et al.			
	A20	2002/0059999	5-23-02	Hua, et al.			

	A21	2002/0134519	9-26-02	Karlson, et al.	O I P E JUN 10 2005 PATENT & TRADEMARK OFFICE U.S. DEPARTMENT OF COMMERCE		
	A22	2002/0162638	11-7-02	Doelle			

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	B1	WO 99/35333	7-15-99	PCT				
	B2	WO 03/050356	6-19-03	PCT				
	B3	WO 99/24661	5-20-99	PCT				
	B4	EP 0991811 B1	6-12-98	Europe				
	B5	EP 0296198 B1	12-21-87	Europe				
	B6	WO 01/75221	4-4-01	PCT				
	B7	WO 99/45202	3-1-99	PCT				
	B8	WO 01/04415	7-5-00	PCT				
	B9	WO 02/097189	5-30-02	PCT				
	B10	WO 00/73576	5-18-00	PCT				
	B11	WO 98/12551	3-26-98	PCT				
	B12	EP 0079726	11-4-82	Europe				
	B13	WO 99/54741	4-12-99	PCT				
	B14	WO 98/56988	6-12-98	PCT				
	B15	WO 00/47817	1-26-00	PCT				

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

Examiner Initial		Date	Document	Translation	
	C1	12-18-03	International Search Report		
	C2	Copyright 2000	The American Heritage Dictionary of the English Language; Fourth Edition; Houghton Mifflin, Co. p. 365		

	C3	Copyright 1992	Chemical Processing Aids in Papermaking; A Practical Guide; Kevin J. Hipolit, Editor; Philip M. Hoekstra, Chairman		
	C4	Copyright 1996	Principles of Wet End Chemistry; William E. Scott, Ph. D.; Copyright 1996, p. 16		
	C5	Copyright 1992	Wet End Chemistry, An Introduction; William E. Scott, Ph.D.; Second Printing 1992, p. 3-4		
	C6	Unknown	Ionic Equilibrium, Solubility and ph Calculations; James N. Butler and David R. Cogley; Wiley-Interscience Publication, p. 365-367		
	C7	Copyright 1979	The Effect of Cations on Pulp and Paper Properties; A.M. Scallan and J. Grignon		
	C8	IMPS 2002-Presentation	Neutralization with CO <sub>2</sub> Feasibility in Photo Paper; Besser, Kleeman, Leigraf		
	C9	April 95	00514700 PaperChem No.: AB6517018; Interactions Between Cationic Starches and Papermaking Fibers; Effect of Starch Characteristics on Fiber Surface Charge and Starch Retention; B. Gupta and W. Scott		
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	C11	September 1989	00284306 PaperChem No. AB6107175; Use of Potentiometric Titration and Polyelectrolyte Titration to Measure the Surface Charge of Cellulose Fiber; R.I.S. Gill; Vol. 1: 437-452; Conference Literature		
	C12	June 1984	00207496 PaperChem No.: AB5508465; Adsorption of Ions at the Cellulose?Aqueous Electrolyte Interface; T.M. Herrington and B.R. Midmore; JCS Faraday I 80, No. 6: 1525-1566		
	C13	Copyright 1978	00146149 PaperChem No.: AB5008078; Surface Phenomena; J. d'A Clark; Pulp Technol. & Trmt. for Paper, Chap. 4: 87-105		
	C14	5-15-89	00141038 PaperChem No.: AB5002967; Interfacial Properties of Polyelectrolyte-Cellulose Systems; F. Onabe; J. Appl. Polymer Sci. 23, No. 10: 2909-2922; cf. ABIPC 49:		
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	C16	July 1977	00120629 PaperChem No.: AB4804688; Adsorption and Flocculation Mechanisms in Paper Stock Systems; K.W. Britt, A.G. Dillon and L.A. Evans		

	C17	December 1975	00101645 PaperChem No.: AB4610134; Zeta-Potential Measurements in Paper Manufacture; T. Lindstrom and C. Soremark; Papier 29 no. 12: 519-525		
	C18	January 1975	00089534 PaperChem No.: AB4510693; Drainage and Retention Mechanisms of Papermaking Systems Treated with Cationic Polymers; Tappi 58, no.1: 99-101		
	C19	June 1974	00084680 PaperChem No.: AB4505839; Importance of Electrokinetic Properties of Wood Fiber for Papermaking; T. Lindstrom, C. Soremark, C. Heinegard and S. Martin-Lof; TAPPI Papermakers Conf. (Boston): 77-84		
	C20	July 1969	00024862 PaperChem No.: AB4004810; Influence of a Alum and pH on the Zeta Potential of Fibers and Additives; A.W. McKenzie, V. Balodis and A. Milgrom; Appita 23, no.1: 40-4		
	C21	March 1967	00003679 PaperChem No.: AB3803679; Retention and Retention Aids; C.J.J. Ninck Blok and B. de Klein; Papierwereld 22, no. 3: 69-81, Dutch; Engl. sum.		
	C22	October 1997	00589937 PaperChem No.: AB6806087; Online Cationic-Demand Measurement for Wet-End Papermaking; C. Veal (Chemtrac Systems); Conference: 1997 Engineering and Papermakers: Forming Bonds for Better Papermaking		
	C23	January 96	00545901 PaperChem No.: AB6700058; Starches for Surface Sizing and Wet-End Addition; P.H. Brouwer; Wochenbl. Papierfabr. 124, no. 1: 19-26		

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.